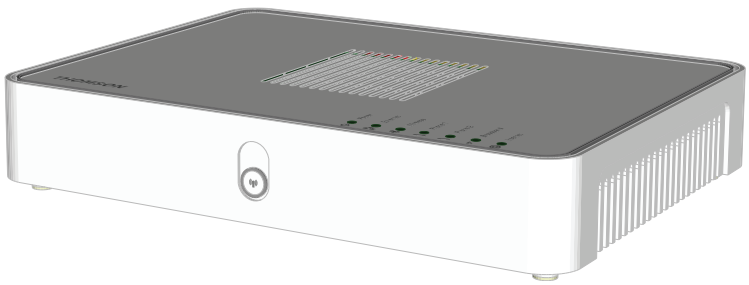
THOMSON

THOMSON TG784n

Wireless-n Multi-Service VoIP ADSL2+ Gateway



Setup and User Guide

THOMSON TG784n

Setup and User Guide

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About this Setup and User Guide

Used Symbols

A ***note*** provides additional information about a topic.

A ***caution*** warns you about potential problems or specific precautions that need to be taken.

Terminology

Generally, the ***THOMSON TG784n*** will be referred to as ***Thomson Gateway*** in this Setup and User Guide.

Typographical Conventions

Following typographical convention is used throughout this manual:

- Sample text indicates a hyperlink to a Web site.

  Example: For more information, visit us at www.thomson.net.

- Sample text indicates an internal cross-reference.

  Example: If you want to know more about guide, see "1 Introduction" on page 7.

- ***Sample text*** indicates an important content-related word.

  Example: To enter the network, you ***must*** authenticate yourself.

- **Sample text** indicates a GUI element (commands on menus and buttons, dialog box elements, file names, paths and folders).

  Example: On the **File** menu, click **Open** to open a file.

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About this Setup and User Guide

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1 Installation

Introduction

In a few minutes you will be able to access the Internet using your Thomson Gateway.

This Setup and User Guide will show you how to set up your Thomson Gateway and how to connect your computer(s) to the Internet.

Main features

As soon as you have completed the installation of your Thomson Gateway you will be able to benefit from all the services offered by your Thomson Gateway. This Setup and User Guide will focus on the following features:

- ***Broadband Internet*** connection.
  The first chapter describes how to connect your Thomson Gateway to the Internet.
- ***Wired and wireless access*** to your local network devices.
  For more information, see "1.4 Connecting a Computer Using the Ethernet Cable" on page 14 and "3 Wireless Access" on page 25.
- ***Voice over IP*** (VoIP) connectivity for traditional phones and IP phones.
  For more information see "4 Telephony" on page 33
- ***Share your media*** with media players and other network devices using the built-in File Server, FTP Server and UPnP AV Server. For more information, see "6 Sharing Content on your Thomson Gateway" on page 49.
- ***Useful networking tools*** like UPnP, Dynamic DNS and many more.
  For more information, see "7 Thomson Gateway Tools" on page 59.
- ***Internet Security:***
  For more information, see "8 Internet Security" on page 69.

Before you can start to use these features, we will first set up your Thomson Gateway.

1 Installation

1.1 Before you start

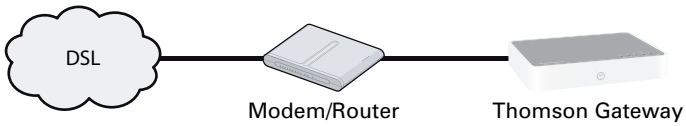
User-specific requirements

You can use your Thomson Gateway as:

- ***DSL Gateway:***
  The Thomson Gateway is connected to the DSL network of your service provider and brings the Internet to your home.

To use the Thomson Gateway in this setup, make sure that the requirements in "1.1.1 DSL Requirements" on page 5 are met.

- ***Home Router:***
  The Thomson Gateway is placed behind your another gateway or modem.



This setup has no special requirements attached to it.

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1.1.1 DSL Requirements

Applicability

This section is only applicable if you are using your Thomson Gateway as DSL gateway. For more information, see "User-specific requirements" on page 4.

DSL Service

The DSL service must be activated on your telephone line by your service provider.

Decoupling the voice and DSL signal

As soon as the DSL service is activated two kinds of signals will be available on your telephone line:

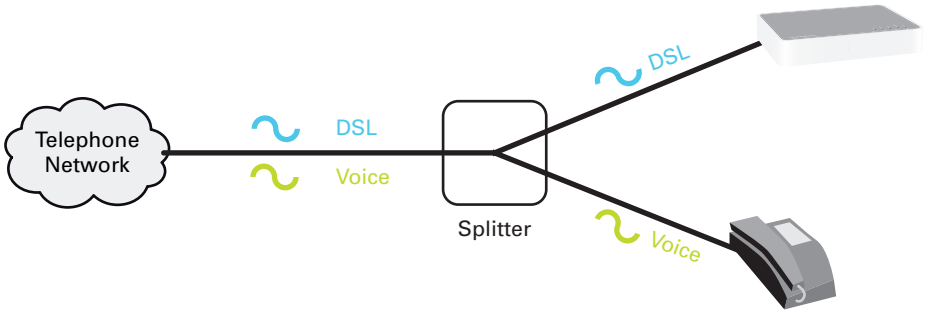
- Voice signals
- DSL signals

To ensure the sound quality of your phone calls, the DSL signal must be omitted from the telephone line before it reaches your phone, otherwise you might hear a noise in the background when using your phone.

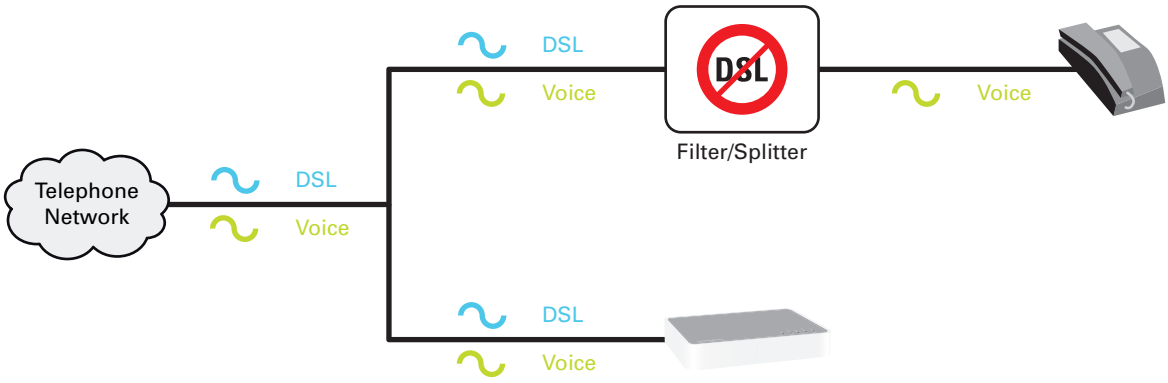
Filters and splitters

To split the DSL signal from the telephone line, you can use one of the following solutions:

- A ***splitter*** that splits the telephone signal into a DSL and Voice signal.



- A ***filter*** between your telephone outlet and your phone. This filter removes the DSL signal and passes the Voice signal.

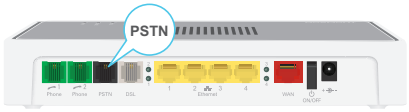


This filter may also be integrated in your Thomson Gateway.

How do I know if my Thomson Gateway has an integrated filter?

Thomson Gateways:

- With an integrated filter have ***no*** **PSTN** port on their back panel.
- Without integrated filter have a **PSTN** port on their back panel.



Here you will have to put a filters/splitter between the telephone outlet and your Thomson Gateway.

1.1.2 Connection Requirements

Wireless connection

If you want to connect your computer using a wireless connection, you will need a WiFi-certified wireless client adapter for each computer you want to connect wirelessly.

Wired connection

If you want to connect one or more computer using a wired connection, make sure those computers are equipped with an Ethernet Network Interface Card (NIC).

Internet connection

You may need the following connection details from your service provider:

- Your service provider's method for connecting to the Internet (for example PPPoE)
- The VPI/VCI (for example 8/35)
- Your user name and password to connect to the Internet for PPP connections
- Your IP settings in case of static configurations

Optionally your service provider may indicate the service profile to use during the setup.

You may have received this information when you subscribed at your Internet Service Provider. You may be prompted for this information at a given step in the installation procedure.

1.2 Installing your Thomson Gateway

Warning

Do not plug in any cables or connect any devices until you are instructed to do so.

Installation methods

There two ways to set up your Thomson Gateway:

- Guided Installation
  The Setup wizard included on the Setup CD will guide you through all configuration aspects of your Thomson Gateway. This is the recommended way to install your Thomson Gateway.
- Manual Installation
  The Setup and User Guide will first help you to connect your computer to the Thomson Gateway. After this is done, you can configure your Thomson Gateway using your web browser.

1.2.1 Guided Installation

Requirements

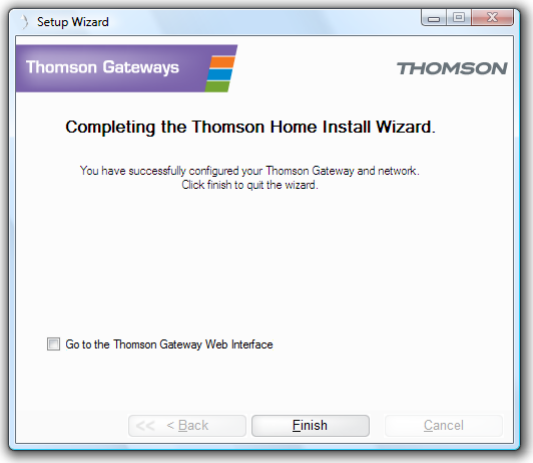
- Your computer must run one of the following operating systems:
  - Microsoft Windows 7 or higher
  - Microsoft Windows 7 x64 or higher
  - Microsoft Windows Vista (SP1) or higher
  - Microsoft Windows Vista x64 (SP1) or higher
  - Microsoft Windows XP SP2 or higher
  - Microsoft Windows XP x64 SP1 or higher
  - Microsoft Windows 2000 SP4
  - Mac OS X 10.4 (Tiger)
  - Mac OS X 10.5 (Leopard)

  If you are using another operating system, use the Manual Installation.
- You must have administrative rights on your computer

Starting the wizard

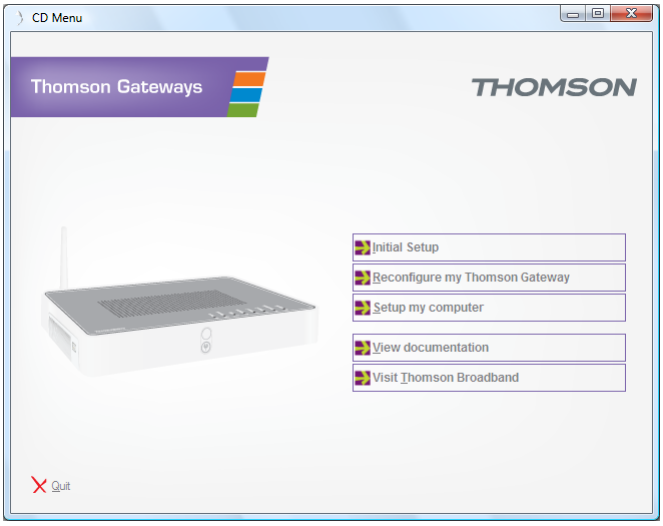
To start the wizard:

1. Insert the Setup CD into your computer's CD- or DVD-ROM drive.
2. If your computer runs:
   - Microsoft Windows: The CD should autostart.
     If the CD does not autostart, see "The Setup CD does not start automatically" on page 78.
   - Mac OS X: Double-click **Menu** in the window with the content of the CD.
3. Select the language of your choice and click **OK**.
4. The Setup wizard will now guide you through the installation of your Thomson Gateway.
5. At the end of the installation, the following screen appears:



6. Select **Go to the Thomson Gateway Web Interface** if you want to go to the Thomson Gateway GUI after closing the wizard. On the Thomson Gateway GUI, you can configure all services of your Thomson Gateway.
7. Click **Finish**.
8. The **CD menu** appears.

CD menu



On the **CD Menu**, you can click:

- **Initial Setup** to connect your computer to the Thomson Gateway and configure it.
- **Reconfigure my Thomson Gateway** to fully reconfigure your Thomson Gateway.

  If you reconfigure your Thomson Gateway via the **CD menu**, the Thomson Gateway will be reconfigured from scratch. All your current settings will be lost. If you only want to make small changes to your configuration (e.g. changing the security), we recommended you to do this via the Thomson Gateway GUI. For more information, see "2.2 Thomson Gateway GUI" on page 21.
- **Setup my computer** to connect your computer to the Thomson Gateway network.
- **View Documentation** to view a list of the documentation that is available for your Thomson Gateway. This list will be automatically updated if you are connected to the Internet.
- **Visit thomson.net** to visit the online support sections.

Actual available items may depend on the Setup CD delivered with your Thomson Gateway.

In case of problems

If you encounter problems during this installation please refer to "9.1 Setup Troubleshooting" on page 78.

1.2.2 Manual Installation

Requirements

JavaScript must be enabled (this is the default setting) on your browser. For more information, consult the help of your web browser.

Procedure

Proceed as follows:

1. Connect the Thomson Gateway to your broadband service.
2. Power on the Thomson Gateway.
3. Connect your computer to the Thomson Gateway.
4. Configure the Thomson Gateway.

This is described in the sections below.

Connect the Thomson Gateway to your broadband service

As described in "User-specific requirements" on page 4, you can use your Thomson Gateway in either of the following scenarios:

- DSL Gateway
- Home Router

When setting up Thomson Gateway as DSL Gateway

Proceed as follows:

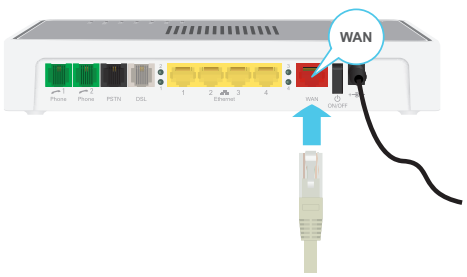
1. Take the DSL cable with the grey connectors. This cable is included in your box.
2. Plug one end of the cable in the grey DSL port on the back of your Thomson Gateway.
3. If you are:
   - Using a splitter, plug the other end of the cable into the Modem/ADSL out put of your splitter.
   - *Not* using a splitter, plug the other end of the cable directly in the wall outlet.

   For more information about splitters, see "Filters and splitters" on page 5.

When setting up Thomson Gateway as Home Router

Proceed as follows:

1. Take an Ethernet cable.
2. Plug one end of the cable in the *red* WAN port on the back of your Thomson Gateway.



3 Plug the other end into the Ethernet port of your Internet gateway/modem.

The **WAN** port can only be used to connect your Thomson Gateway to an Internet gateway/modem. You can not use it to connect your computer to the Thomson Gateway.

Power on the Thomson Gateway

Proceed as follows:

1 Connect the power cord to the Thomson Gateway's power port.
2 Plug the other end into an electrical outlet.
3 Push the power button to turn on the Thomson Gateway.
4 Wait two minutes to allow the Thomson Gateway to complete the start up phase.

Connect your computer to the Thomson Gateway

Setting up a wireless connections

For more information on how to setup a wireless connection to your Thomson Gateway, see "3 Wireless Access" on page 25.

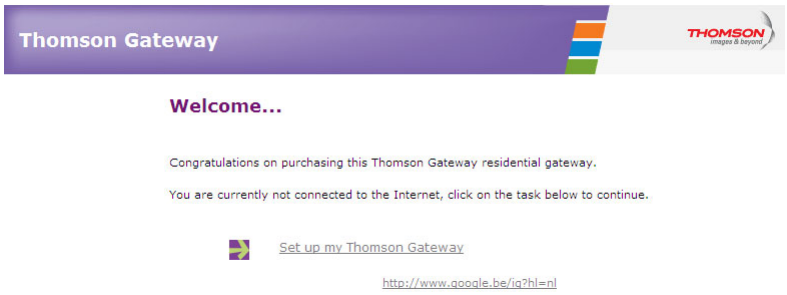
Setting up a wired connection

For more information on how to setup a wired connection (i.e. an Ethernet connection) to your Thomson Gateway, see "1.4 Connecting a Computer Using the Ethernet Cable" on page 14.

Configure the Thomson Gateway

Proceed as follows:

1 Open your web browser.
2 The Thomson Gateway informs you that you have not yet configured your Thomson Gateway.


Thomson Gateway
THOMSON
images & beyond
Welcome...
Congratulations on purchasing this Thomson Gateway residential gateway.
You are currently not connected to the Internet, click on the task below to continue.
Set up my Thomson Gateway
http://www.google.be/ig?hl=nl

If this window does not appear browse to http://dsldevice.lan or to the IP address of your Thomson Gateway (by default: 192.168.1.254) and click **Thomson Gateway** on the menu on the left-hand side.

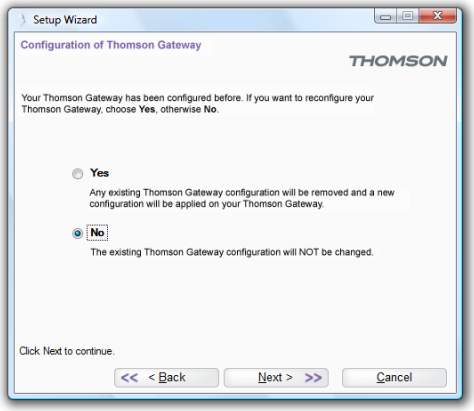
3 Click **Setup my Thomson Gateway**.
4 The **Easy Setup** wizard appears. This wizard will guide you through the configuration of your Thomson Gateway. Click **Next** and follow the instructions.

1.3 Adding a New Computer to your Network

Guided Installation

If you configured your Thomson Gateway using the Guided Installation, use the same procedure on the computer that you want to add.

When the **Setup wizard** informs you that the Thomson Gateway has already been configured, select **No** and click **Next** to continue.


Setup Wizard
Configuration of Thomson Gateway
THOMSON
Your Thomson Gateway has been configured before. If you want to reconfigure your Thomson Gateway, choose Yes, otherwise No.
Yes
Any existing Thomson Gateway configuration will be removed and a new configuration will be applied on your Thomson Gateway.
No
The existing Thomson Gateway configuration will NOT be changed.
Click Next to continue.
< Back
Next >
Cancel

Manual Installation

Setting up a wireless connections

For more information on how to setup a wireless connection to your Thomson Gateway, see "3 Wireless Access" on page 25.

Setting up a wired connection

For more information on how to setup a wired connection (i.e. an Ethernet connection) to your Thomson Gateway, see "1.4 Connecting a Computer Using the Ethernet Cable" on page 14.

1.4 Connecting a Computer Using the Ethernet Cable

Requirements

- Both your computer and Thomson Gateway must have a free Ethernet port.
- Your computer must be configured to obtain an IP address automatically. This is the default setting.

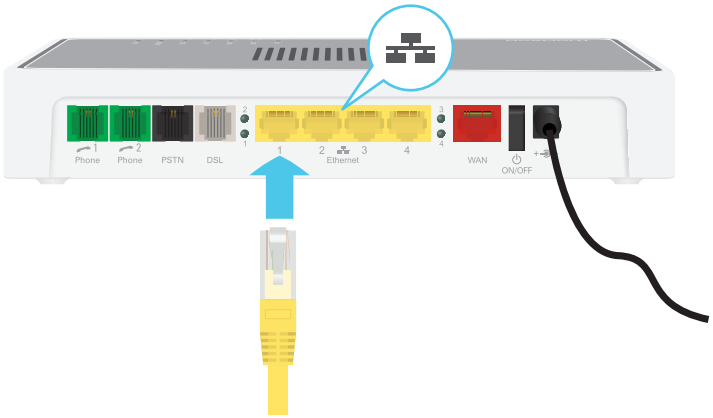
Ethernet cable

In your package, you will find a cable with yellow connectors. This is the Ethernet cable.

Procedure

Proceed as follows:

1 Connect one end of the Ethernet cable to one of the *yellow* Ethernet ports of your Thomson Gateway:



You can not use the red **WAN** port for this. The **WAN** port can only be used to connect your Thomson Gateway to an Internet gateway/modem.

2 Connect the other end of the Ethernet cable to your computer.

3 Your computer is now connected to your network. No additional configuration is needed.

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2 Thomson Gateway Basics

In this chapter

Topic	Page
Thomson Gateway LED Behaviour	16
Thomson Gateway GUI	21
Backing Up/Restoring your Configuration	24

2 Thomson Gateway Basics

2.1 Thomson Gateway LED Behaviour

Content

This chapter describes the behaviour of:

- Status LEDs
- WPS Button LED
- Ethernet LEDs

2.1.1 Status LEDs

Introduction

On the top panel of your Thomson Gateway, you can find a number of status LEDs, indicating the state of the device.

Power LED

Colour	State	Description
Green	Solid on	Power on, normal operation
Red	Solid on	Power on, self-test failed, indicating device malfunction
Orange	Blinking	Bootloader active (during upgrade)
Off		Power off

Ethernet LED

Colour	State	Description
Green	Solid on	Ethernet connection, no activity
	Blinking	Ethernet activity
Off		No Ethernet connection

Wireless LED

Colour	State	Description
Green	Solid on	No wireless activity, WPA(2) encryption
	Blinking	Wireless activity, WPA(2) encryption
Orange	Solid on	No wireless activity, WEP encryption
	Blinking	Wireless activity, WEP encryption
Red	Solid on	No wireless activity, no security
	Blinking	Wireless activity, no security
Red/green	Toggling	Wireless client registration phase
Off		WLAN disabled

Phone LED

Colour	State	Description
Green	Solid on	VoIP service up
	Blinking	VoIP activity
Off		VoIP service down

Broadband LED

Colour	State	Description
Green	Solid on	DSL line synchronised
	Blinking	Pending DSL line synchronisation
Off		No DSL line

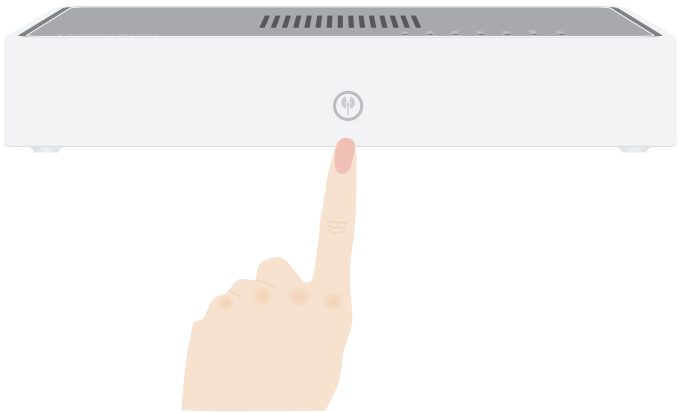
Internet LED

Colour	State	Description
Green	Solid on	Internet connectivity, no activity
	Blinking	Internet activity
Red	Solid on	Internet connection setup failed
Off		No Internet connection

2.1.2 WPS Button LED

WPS button

The Wi-Fi Protected Setup (WPS) button allows you to add new wireless clients to your network.



For more information, see "3.1 Connecting Your Wireless Client via WPS" on page 26.

WPS Button LED

Colour	State	Description
Green	Solid On	Client successfully registered via WPS
Orange	Blinking	WPS registration ongoing
Red	Blinking	Error occurred

2.1.3 Ethernet LEDs

Ethernet LED

A LED may be provided per Ethernet port to indicate link integrity (or activity).

LED Status	Description
Off	No connection on this port
Solid on	Ethernet link up
Blinking	Data is flowing from/to this port

2.2 Thomson Gateway GUI

Introduction

The Thomson Gateway Graphical User Interface (GIU) allows you to configure your Thomson Gateway using your web browser.

Requirements

JavaScript must be enabled (this is the default setting) on your browser. For more information, consult the help of your web browser.

Accessing the Thomson Gateway GUI

Proceed as follows:

1. Open your web browser.
2. Browse to http://dsldevice.lan or to the IP address of your Thomson Gateway (by default: 192.168.1.254).
3. If you have protected your Thomson Gateway with a user name and password, the Thomson Gateway will prompt you to enter these. Enter your user name and password and click **OK**.
4. The Thomson Gateway GUI appears.

Access the Thomson Gateway via UPnP

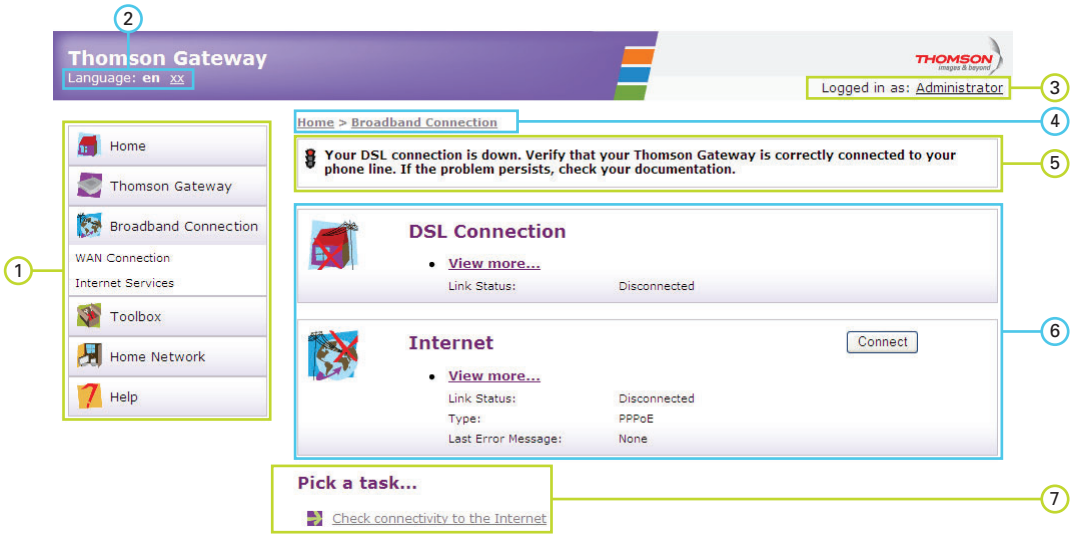
You can also access the Thomson Gateway GUI using the Internet Gateway Device (IGD) icon if your computer runs one of the following operating systems:

- Windows 7
- Windows Vista
- Windows XP

For more information, see "7.1 UPnP" on page 60.

Components

All the pages contain following components:



Label	Description
1	Menu
2	Language bar
3	Login section
4	Navigation bar
5	Notification area
6	Content pane
7	Tasks

Menu

The menu consists of the following menu items:

- **Home**:
  Allows you to go back to the home page.
- **Thomson Gateway**:
  Provides basic information on the Thomson Gateway.
- **Broadband Connection**:
  Allows you to view/configure your broadband connections.
- **Toolbox**:
  Allows you to configure the network services and Internet security settings of your Thomson Gateway.
- **Home Network**:
  Allows you to manage your local network.
- **Help**:
  Allows you to view context-related help information.

Language bar

The language bar allows you to change the language of the Thomson Gateway Web interface.

The language bar will only be shown if more than one language is available.

Login section

In this section you can see the current user name.

By clicking the user name, you can:

- Change your password.
- Switch to another user.

Navigation bar

The location bar displays your current position on the Thomson Gateway GUI.

Notification area

The notification area is used to display:

- Error messages, indicated by a red traffic light.
- Warnings, indicated by an orange traffic light.
- Information, indicated by a green traffic light.

If none of these events occur, the notification area will not be shown.

Content pane

The content pane displays the information and configurable items of the selected item.

Tasks

To allow a quick configuration of your Thomson Gateway, some pages may offer you a number of related tasks in the **Pick a task** list. These tasks will guide you to the page where you can perform the selected task.

2.3 Backing Up/Restoring your Configuration

Introduction

Once you have configured your Thomson Gateway to your needs, it is recommended to backup your configuration for later use. This way you can always return to your working configuration in case of problems.

Backing up your configuration

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Thomson Gateway** menu, click **Configuration**.
3. In the **Pick a task** list, click **Save or Restore Configuration**.
4. Under **Backup current configuration**, click **Backup Configuration Now**.
5. The Thomson Gateway prompts you to save your backup file.
6. Save your file to a location of your choice.

Warning

Do not edit the backup files, this may result in corrupt files making them worthless as a configuration backup.

Restoring your configuration

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Thomson Gateway** menu, click **Configuration**.
3. In the **Pick a task** list, click **Save or Restore Configuration**.
4. Under **Restore saved configuration**, click **Browse**.
5. Browse to your backup file and open it.

These files usually have **.ini** as extension.

6. The Thomson Gateway restores your configuration.

3 Wireless Access

Introduction

With the built-in wireless access point you do no longer need a cable connection between your computer and your Thomson Gateway.

What you need to set up a wireless network

To set up a wireless network, you need the following components:

- A Wireless Access Point (integrated into your Thomson Gateway)
- A Wireless client

Wireless Access Point

You can consider the wireless access point as the heart of your wireless network. The wireless access point:

- Connects different wireless devices with each other.
- Secures the data sent over wireless connection.

The Thomson Gateway comes with an integrated wireless access point.

Wireless client

The wireless client allows you to connect a device, typically a computer, to a wireless access point. Both built-in and external (for example via USB) clients are available.

Other devices like media players and smartphones may also have a built-in wireless client. Check the documentation of your device for more information.

Check the documentation of your computer if you are not sure if your computer is equipped with a wireless client.

Configuring your wireless clients

Before you can start surfing the internet with a wireless connection, you must first connect your wireless client to your Thomson Gateway wireless access point.

For more information, see "3.1 Connecting Your Wireless Client via WPS" on page 26 and "3.2 Connecting Your Wireless Client without WPS" on page 28.

Secure your wireless connection!

Because you no longer need a physical connection, everyone who is within the range of your Thomson Gateway can access your network. If you do not protect your wireless network, the following could happen:

- People can use your connection to access the Internet.
- Hackers can use your connection to commit computer crimes.

You can easily prevent this by securing your wireless connection. For more information, see "3.3 Securing Your Wireless Connection" on page 29.

3.1 Connecting Your Wireless Client via WPS

WPS

Wi-Fi Protected Setup (WPS) allows you to add new wireless clients to your network in a swift and easy way, without the need to enter all your wireless settings (network name, wireless key, encryption type).

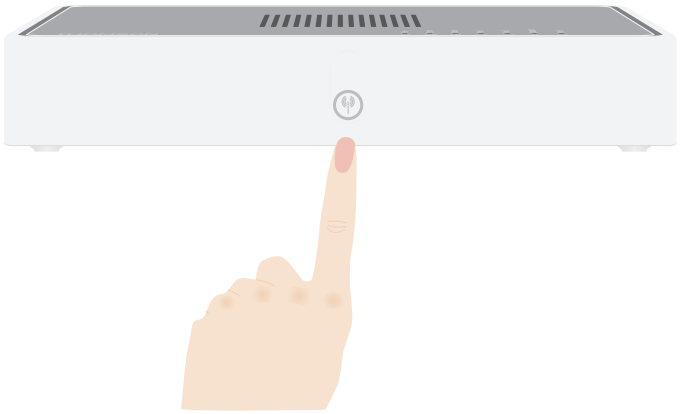
Requirements

- Your wireless client must support WPS. Check the documentation of your wireless client for this.
- Your Thomson Gateway must use WPA(2)-PSK encryption (default encryption) or no encryption. WPS with WEP encryption is not possible.

Procedure

Proceed as follows:

1 Shortly press the WPS button on the Thomson Gateway:



2 The WPS button LED starts blinking orange. This indicates that the Thomson Gateway is now searching for wireless clients that are in registration mode. You now have two minutes to start WPS on your wireless client.

3 Start WPS on your wireless client.

The WPS button LED is solid green

This indicates that you have successfully registered your wireless client. You are now connected to the Thomson Gateway network.

The WPS button LED is blinking red

This indicates that the Thomson Gateway could not find your wireless client. Make sure that the WPS button LED is blinking orange when you start WPS on your wireless client.

Troubleshooting

If you are having trouble connecting your wireless client via WPS, try to configure it manually. For more information, see "3.2 Connecting Your Wireless Client without WPS" on page 28.

3.2 Connecting Your Wireless Client without WPS

Before you start

Before you can connect a computer to your wireless network you need to know the wireless settings that are currently used by the Thomson Gateway, i.e.:

- The Network Name (SSID)
- The wireless key

What Network Name (SSID) is my Thomson Gateway using?

If you did not change the SSID manually, your Thomson Gateway uses the Network Name that is printed on the bottom panel label of your Thomson Gateway.

What wireless security is my Thomson Gateway using?

You have not yet configured your Thomson Gateway

In this case, no wireless key is used.

You have already configured your Thomson Gateway using the Guided Installation

If you choose to use the wireless settings proposed by the Setup wizard, you can find the wireless key on the label on the bottom of your Thomson Gateway.

Forgot your wireless settings?

If you have changed the wireless settings manually and you can't remember your settings, try one of the following:

- If one of your computers is already connected to your network:
  1. Browse to the Thomson Gateway GUI on that computer.
  2. On the **Home Network** menu, click **Wireless**.
  3. In the upper-right corner, click **Details**.
  4. Under:
     - **Configuration**, you can find the network name (SSID).
     - **Security**, you can find the encryption.
- If none of your computers is connected to your network, connect a computer using a wired connection and follow the procedure above to find out what your wireless settings are.

The last option is to reset your Thomson Gateway (all your changes will be lost!) and reconfigure it. For more information, see "9.6 Reset to Factory Defaults" on page 83.

Procedure

Configure your computer with the same wireless settings as your Thomson Gateway. For more information, consult the documentation of your wireless client.

3.3 Securing Your Wireless Connection

Introduction

By using encryption, you can protect the wireless communication between the wireless clients and your Thomson Gateway with a wireless key. This way, only clients which use the correct Network Name (SSID) and wireless key can connect to your network.

Encryption types

Over the years a number of encryption types have been developed. The list below gives you an overview of the supported encryption types ordered by descending security level, you will find the highest level of security at the top of the list:

- WPA-PSK Encryption:
  The wireless data is being encrypted with a user-defined key. Wireless clients must be configured with this key before they can connect to the Thomson Gateway.
- WEP Encryption:
  The first encryption type used for wireless connections. Like WPA-PSK it uses a user-defined key, but WEP has been proven to have some security issues. ***We strongly recommend you to use WPA-PSK instead.***

Which encryption type should I use?

We strongly recommend you to ***WPA-PSK***.

Although the Thomson Gateway allows you to use WEP or no security, it is not recommended to use these settings. Only use WEP if you have wireless clients that don't support a higher encryption level.

Configuring the wireless encryption

Proceed as follows:

1. Open the Thomson Gateway GUI.
2. On the left menu, click **Home Network**.
3. Under **Wireless**, click your access point.

   Your access point is listed in the following format: "WLAN:<Network Name> (<Actual Speed>)". For example, **WLAN: Thomson83C7C7 (54Mbps)**.
4. The **Wireless Access Point** page appears.
5. In the Navigation bar, click **Configure**.
6. Under **Security**, you can change the **Encryption**. If you want to use:
   - WPA-PSK encryption, continue with "3.3.1 Configuring WPA-PSK Encryption" on page 30.
   - WEP encryption, continue with "3.3.2 Configuring WEP Encryption" on page 31.

3.3.1 Configuring WPA-PSK Encryption

Procedure

Continuing from "Configuring the wireless encryption" on page 29:

1. Select **Use WPA-PSK Encryption**.
2. In the **WPA-PSK Encryption Key** box, type a the key of your choice. The key must be in one of the following formats:
   - 8 to 63 alphanumeric characters. For example: MyKey123
   - 8 to 64 hexadecimal characters (characters from 0 to 9 and from A to F). For example: C54F48A5.
3. In the **WPA-PSK Version** list, click the WPA-version of your choice. Following options are available:
   - **WPA2**:
     WPA2 is the most secure version, but not all wireless clients already support it. Before you select this version, make sure all of your wireless clients support it.
   - **WPA+WPA2**:
     If not all of your wireless clients support WPA2 or you are not sure if they support WPA2, we recommend you to choose WPA+WPA2. Wireless clients that support WPA2 will use WPA2, the others will use WPA.
   - **WPA**:
     If none of your wireless clients support WPA2 choose this option.

   If you want to configure WPA2 on the built-in wireless utility of Windows XP Service Pack 2 (SP2), you first have to:
   - Upgrade your Windows XP to Service Pack 3.

   - or -
   - Install the following update: http://support.microsoft.com/kb/917021.
4. Click **Apply**.
5. Configure your wireless client(s) with the same settings.

3.3.2 Configuring WEP Encryption

Warning

Although the Thomson Gateway allows you to use WEP or no security, it is not recommended to use these settings. Only use WEP if you have wireless clients that do not support any higher encryption levels.

Procedure

Continuing from "Configuring the wireless encryption" on page 29:

1. Select **Use WEP Encryption**
2. In the **WEP Key Length** list, click the desired key length (a higher key length offers higher security).
3. In the **Encryption key** box, type a Network key of your choice. If you are using:
   - A 64-bit key:
     Type 10 hexadecimal characters (characters from 0 to 9 and from A to F) or 5 alphanumeric characters.
   - A 128-bit key:
     Type 26 hexadecimal characters (characters from 0 to 9 and from A to F) or 13 alphanumeric characters.
4. Click **Apply**.
5. Configure your wireless client(s) with the same settings.

3 Wireless Access

4 Telephony

Voice over IP (VoIP)

VoIP is a technology in which telephone calls are made over the Internet. This allows you to save on communication costs, especially for long-distance calls.

The expensive solution

To be able to make your phone calls over the Internet you could:

- Buy an IP phone.
  These IP phones are special phones that you can connect to your Internet Gateway.
- Install VoIP software on your computer and make your phone calls via your computer.

The THOMSON solution

With the Thomson Gateway you can make both VoIP and traditional telephone calls using a traditional analogue phone or

If your Thomson Gateway is not powered, the traditional telephone network (if connected) will automatically selected. This way you are still able to make emergency calls.

In this chapter

This chapter covers following topics:

Topic	Page
Setting Up Your Telephone Network	34
Address Book	39
Telephony Services	40
Viewing Telephony Statistics	46

4.1 Setting Up Your Telephone Network

Procedure

To set up your Thomson Gateway successfully, you must follow the following steps:

1. Connect your traditional phone(s) or fax to the green **Phone** port(s) on the Thomson Gateway's back panel.
2. Connect your Thomson Gateway to the traditional network.
   For more information, see "4.1.1 Connection to the Traditional Telephone Network" on page 35.
3. Configure the VoIP service on your Thomson Gateway.
   For more information, see "4.1.2 Configuring the Thomson Gateway VoIP Settings" on page 36.

4.1.1 Connection to the Traditional Telephone Network

Combining VoIP with the traditional telephone network

The Thomson Gateway allows you to use both the traditional telephone network (PSTN) as the VoIP network on the same device.

This way, you can still make calls over the traditional network if the VoIP service is down (e.g. your Thomson Gateway is powered off).

Be aware that, if you are not connected to the traditional telephone network, emergency calls will not be possible when your Internet connection is down or your Thomson Gateway is powered off.

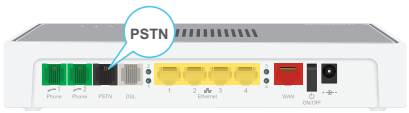
What do I have to do to configure this?

If your Thomson Gateway:

- Does ***not*** have a **PSTN** port on its back panel then the Thomson Gateway has an integrated filter. Both DSL and PSTN are coming in via the DSL port, so no extra connections are needed.

  In this case the DSL port must be directly connected to your telephone outlet. Do not put any filter or splitter between them!

- Has a **PSTN** port on its back panel you have to connect this port to the **Phone** output of your filter or splitter:



For more information about filters and splitters, see “Filters and splitters” on page 5.

4.1.2 Configuring the Thomson Gateway VoIP Settings

Introduction

If you configured your Thomson Gateway using the Guided Installation, the VoIP settings may already be configured by the Setup wizard.

If you choose to configure your Thomson Gateway manually or you still need to configure the VoIP settings, you can follow the procedure below.

How can I check if the VoIP settings have already been configured?

If the Phone LED is:

- Solid or blinking green then the telephony service has already been configured. No configuration is needed.
- Off then telephony service is not yet configured. Follow the instructions below.

Requirements

Your Internet connection must be up and running before you can configure Internet telephony.

Configuring the VoIP settings

Proceed as follows:

1. Enter the proxy and registrar settings.
2. Enter your VoIP account settings.

Enter the proxy and registrar settings

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. In the Navigation bar, click **Expert configure**.
4. Complete the following fields with the settings provided by your VoIP provider:
   - **Proxy:**
     Type the URL (for example: sip.provider.com) or IP address of the proxy.
   - **Registrar:**
     Type the URL (for example: sip.provider.com) or IP address of the registrar.
   - **Registrar Port** and **Proxy Port**.
     In most cases the default port (5060) will be used. Only change these values if your provider is using other port numbers.
5. Click **Apply**.

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Enter your VoIP account settings

Proceed as follows:

1. In the Navigation bar, click **Configure**.
2. Under **Service Configuration**, select **Enable Telephony**.
3. Under **Telephone Numbers**, complete the following fields:
   - **SIP URI**:
     The Uniform Resource Identifier (URI) of your SIP account (for example: 050579, john.doe,...). This is the telephone number that people have to dial to call you.
   - **Username**:
     The user name of your VoIP account (for example: 050579, john.doe,...).
   - **Password**:
     The password of your VoIP account.
   - **Displayname**:
     The name that you want people to see on the phone's screen when you are calling. Your VoIP provider may not support this feature.
   - **Abbreviated number**:
     An internal number to call the phones associated with this VoIP account.
   - **Port**:
     The phone port that you want to associate with this VoIP account. If you want to use the same VoIP account for all ports, select Port '**All**'.
4. Click **Apply**.

Verifying Telephone Connectivity

Proceed as follows to verify the voice connection:

1. Make sure the Thomson Gateway is turned on.
2. Check whether your phone is properly attached to the Thomson Gateway.
3. Make sure the Internet telephony service is enabled and configured.
4. The **Phone** LED must be solid green.
5. Pick up your phone, wait for the dialling tone, and dial the number. If you dial a '#' after the phone number, the phone number will be called over the traditional telephone network.

The phone(s) attached to the Thomson Gateway can only receive incoming VoIP calls, as long as your Thomson Gateway is turned on and the **Phone** LED is lit.

For calls over the traditional telephone, your phones are line-powered by the telephone company and can therefore always be reached, even if the Thomson Gateway is turned off.

Multiple Identities

You can assign up to three Internet telephone numbers or URIs to one or both phone ports, or you can assign a common number to both phone ports.

Using Multiple Identities

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. In the Navigation bar, click **Configure**.
4. In the **Pick a task** list, click **Use multiple identities**.

5 Click **Add**.
6 Enter another URI, your user name and password.
7 Choose the phone port for which you want to use this telephone number.
8 Click **Apply**.

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4.2 Address Book

Introduction

The Address Book page is located on the Thomson Gateway GUI and allows you to:

- Store your contacts on the Thomson Gateway GUI.
- Initiate a call or send a message by clicking the phone number or e-mail address in the contact details.

Accessing the Address Book page

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Address Book**.
3. The **Address Book** page appears.

Managing contacts

To:

- Add a contact, click **Add**.
- Edit a contact, click **Edit**.
- Delete a contact, click **Delete**.

All information provided per contact is optional except for the last and first name, and can be updated or completed at any time.

The Address book resides on the Thomson Gateway, so everyone with access to the Thomson Gateway web interface can view and use the Address book.

Using the Address book

The contact details of a contact in your Address book allow you to directly make a call or send a message from out the Thomson Gateway web interface.

Per contact you can click (if available):

- **Business**: to make a call to the contact's business telephone number
- **Home**: to make a call to the contacts home telephone number
- **Mobile**: to make a call to the contact's mobile telephone number
- **Other or SIP uri**: to make a call to the contact's VoIP telephone number
- **E-mail** to send an E-mail message to the contact with your e-mail client.

4.3 Telephony Services

Introduction

Telephony services add extra functionality to your phone. For example: putting a call on hold, transferring calls,...

Requirements

Before you can use a service, it:

1. Must be supported by your service provider.
   For more information, see "4.3.1 Services supported by Your Service Provider" on page 41.
2. Must be activated on your Thomson Gateway.
   For more information, see "4.3.2 Activating a Telephony Service on your Thomson Gateway" on page 42.

Only if these two conditions are met, you will be able to use all functions associated to the service. For more information, see "4.3.3 Using Telephony Services" on page 43.

4.3.1 Services supported by Your Service Provider

Procedure

To see which services are supported by your provider:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. In the Navigation bar, click **Configure**.
4. In the **Pick a task** list, click **View Telephony Services**.
5. Under **Telephony Services**, you can see the services that are supported by your provider.

Activation

If you want to use one of the supported services, make sure it is activated. For more information, see "4.3.2 Activating a Telephony Service on your Thomson Gateway" on page 42.

4.3.2 Activating a Telephony Service on your Thomson Gateway

How can I (de)activate a service on my Thomson Gateway?

You can (de)activate services in two ways:

- Via (de)activation codes on your phone.
- Via the Thomson Gateway GUI.

Activating a Telephony Service via Your Phone

Where can I find the (de)activation codes?

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. In the Navigation bar, click **Configure**.
4. In the **Pick a task** list, click **View Telephony Services**.
5. In the **Telephony Services** table, you can find the activation and deactivation codes.

- **Telephony Services**

Service	Activation Code	Deactivation Code	Activated
Call Hold	*94	#94	Yes
Call Waiting	*43	#43	Yes
Call Waiting On Call Basis	*43*	#43*	Yes
Call Transfer	*96	#96	Yes
Conference Call (3 Party);	*95	#95	Yes
Calling Line Identification Presentation	*30	#30	Yes

Using the codes

To (de)activate one of the services just dial the corresponding code on your phone.

For example, to activate **Call Hold** dial *94; to deactivate the service dial #94.

Activating a Telephony Service via the Thomson Gateway GUI

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. In the Navigation bar, click **Configure**.
4. In the **Pick a task** list, click **View Telephony Services**.
5. In the Navigation bar, click **Configure**.
6. To:
   - Activate a service select the check box next to the service.
   - Deactivate a service clear the check box next to the service.
7. Click **Apply**.

4.3.3 Using Telephony Services

Introduction

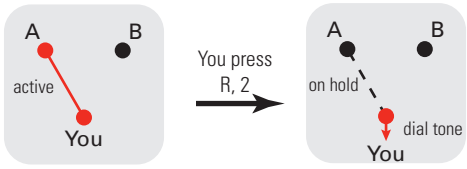
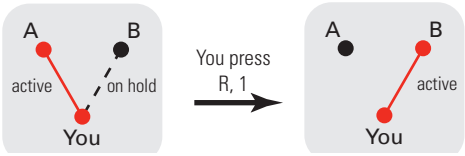
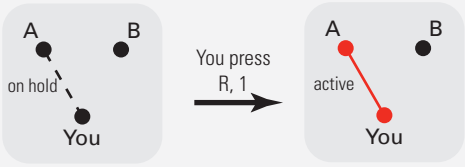
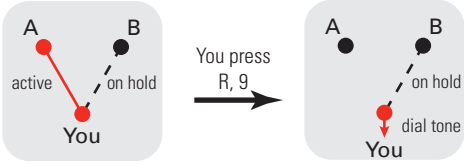
This section provides an overview of the functions that will be available if you activate one of the following services:

- Call Hold service
- Call Waiting service
- Conference Call (3 Party) service
- Call Transfer

For more information on the other services, please contact your service provider.

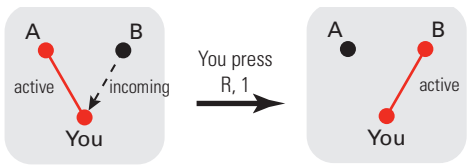
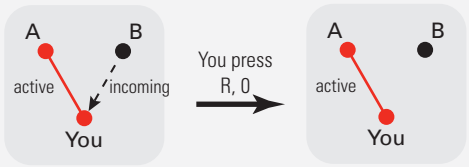
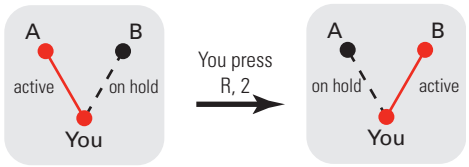
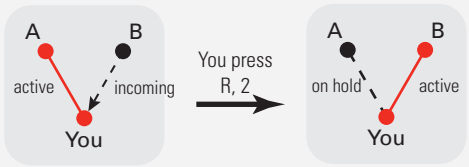
Call Hold service

If the **Call Hold** service is activated, you can use the following functions:

To...	Press...	Illustration
Put an active call on hold and enable a call set up (the dial tone is generated)	R, 2	
Terminate the call on hold	R, 0	
Terminate an active call and switch to the call on hold	R, 1	
Retrieve the call on hold (when there is no active call)	R, 1	
Terminate an active call and enables a call set up (the dial tone is generated)	R, 9	

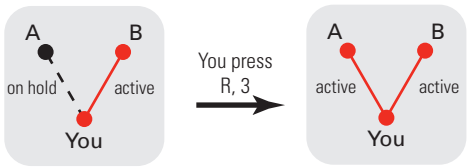
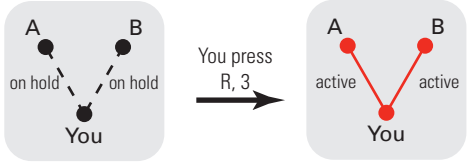
Call Waiting service

If the **Call Waiting** service is activated, you can use the following functions:

To...	Press...	Illustration
Terminate an active call and switch to an incoming call	R, 1	
Reject an incoming call	R, 0	
Switch between an active call and a call on hold	R, 2	
Switch between an active call and an incoming call	R, 2	

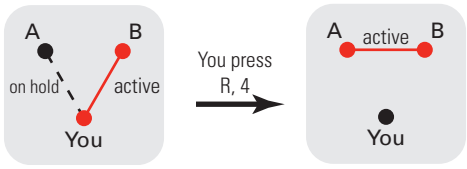
Conference Call (3 Party) service

If the **Conference Call (3 Party)** service is activated, you can use the following functions:

To...	Press...	Illustration
Establish a conference call (or 3 party connection)	R, 3	
During a conference call: put B and C on hold	R, 2	
During a conference call: retrieve B and C when they are on hold	R, 3	

Call Transfer

If the **Call Transfer** service is activated, you can use the following functions:

To...	Press...	Illustration
Transfer a call	R, 4	

4.4 Viewing Telephony Statistics

Introduction

The **Telephony Statistics** page on the Thomson Gateway GUI lists:

- Successful incoming calls.
- Missed incoming calls.
- Successful outgoing calls.
- Failed outgoing calls.

Viewing the telephony statistics

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Telephony**.
3. The **Telephony** page appears.
   On this page you can see an overview of your last calls.
4. To view more detailed statistics, click **View telephony statistics and logs** in the **Pick a task** list.
5. The **Telephony Statistics** page appears and displays the number of:
   - Successful incoming calls.
   - Missed incoming calls.
   - Successful outgoing calls.
   - Failed outgoing calls.

   for each phone separately and combined.

Used icons

To displays the call logs, the following icons are used:

Icon	Description
	Incoming call
	Outgoing call

5 Saving Energy with Your Thomson Gateway

Code of Conduct v3

To prove its commitment to protect the environment, THOMSON has signed the Code of Conduct v3 (CoC v3), an agreement to reduce the power consumption of broadband devices.

It provides rules for the power consumption in:

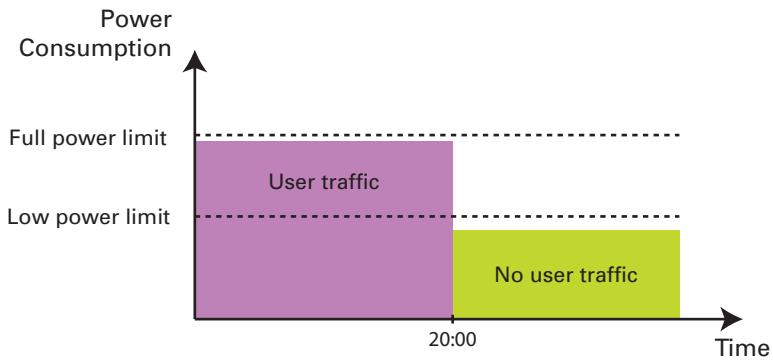
- Full power state:
  This is the normal operation mode of the device, where all functionality is enabled.
- Low power state:
  When there is no user traffic on the device, the device should switch to low power mode. This is a state in which devices are only allowed to use a limited amount of energy to be able to power its components and respond to user activity.

Example:

Take the following example:

- The user switches off his computer at 20:00.
- There are no other devices connected to the Thomson Gateway.

The Thomson Gateway switches to low power mode. This results in a considerable drop in the overall power consumption of the Thomson Gateway.



THOMSON power saving innovations

On top of the CoC v3 measures, THOMSON has developed the Automatic Power Management to further reduce the power consumption.

Automatic Power Management

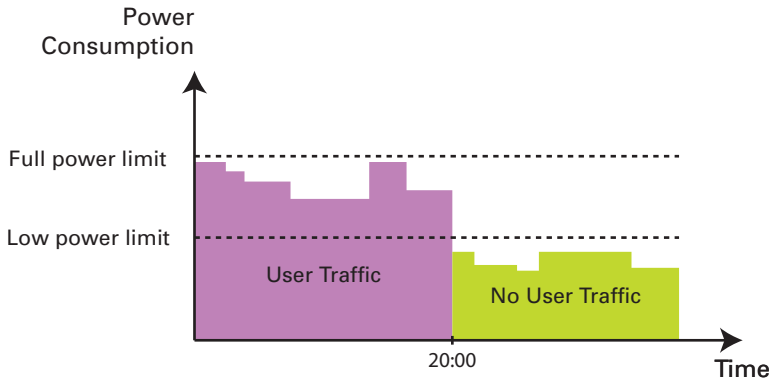
The Thomson Gateway constantly monitors the user activity and uses this information to optimise the power consumption:

For example:

- When there is no or low user activity, the Thomson Gateway ***reduces the clock frequency of the central processor***. The lowered clock frequency will result in a lower power consumption.
- ***Switch the wireless interface to a reduced power mode*** in which the access point is available for connection, but other functions are turned off. This is only possible if there are no devices connected to the Thomson Gateway.

Example:

If we use the same example as in the previous section, you can see that the Thomson Gateway is now able to further reduce the power consumption in periods where there is less action required from the Thomson Gateway (for example: no wireless devices connected, low user traffic,...).



Zero Power Consumption

If you will not be using your Thomson Gateway for a longer time (for example: you are going on holiday), you might consider to turn off the Thomson Gateway. This way no energy will be consumed at all.

Be aware that if you turn off the Thomson Gateway, ***all services provided by it will not be available***. For example:

- No VoIP calls
  You will no longer be able to make phone calls over the Internet. Your phone calls will automatically be done via the traditional phone network (if available).
- No Digital TV
  If your set-top box is connected to your Thomson Gateway, he will no longer be able to connect to the Internet.
- ...

6 Sharing Content on your Thomson Gateway

Introduction

The Thomson Gateway allows you to store your data on a centralised place in the network. This way you can share your files with everyone that is connected to your network.

Requirements

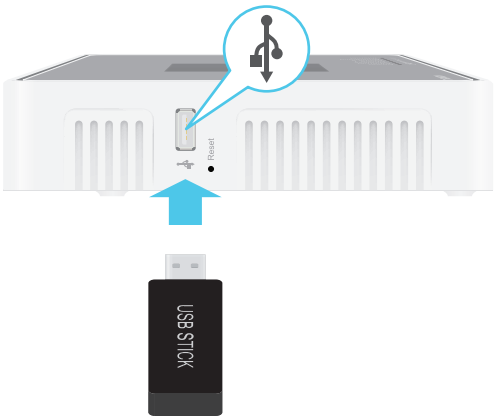
Your USB storage device must be formatted as FAT32.

To format your device for FAT32, consult the help of your operating system. Make sure to make a copy of your data before you doing this. Formatting your device will erase all data.

Connecting your USB storage device to the Thomson Gateway

Proceed as follows:

1 Plug your USB memory stick or external hard disk in (one of) the USB master port(s) of your Thomson Gateway.



Do not remove your USB storage device without unmounting it first, otherwise data might be lost! For more information, see "6.5 Safely Removing your USB Storage Device" on page 58.

2 If you want to:

- Share your files with other devices on the network (for example: a computer) proceed with "6.1 Using the Network File Server" on page 50.
- Share your media with UPnP AV media clients (for example: a media player or media centre), proceed with "6.2 Using the UPnP AV Media Server" on page 53.
- Make your files available for FTP access, proceed with "6.3 Using the FTP Server" on page 54.

6.1 Using the Network File Server

Introduction

The Network Server allows you to share the content on your USB storage device with other devices that are connected to your ***Thomson Gateway network*** (mostly computers).

These devices have ***read and write access*** to this USB device.

Procedure

To enable the Network File Server:

1. Browse to the Thomson Gateway GUI.
2. On the **Tools** menu, click **Content Sharing**.
3. In the Navigation bar, click **Configure**.
4. Under **Network File Server (Windows Networking)**, click **Server Enabled**. It is also recommended to complete in following fields:
   - **Server Name**:
     You will use this name to access the Thomson Gateway. If you leave this field empty you can only access your USB storage device by entering the IP address (by default: 192.168.1.253)
   - **Server Description**:
     Here you can add a short description for what kind of data is stored on the USB storage device.
   - **Workgroup**:
     Enter the same workgroup as your computer(s).
5. Click **Apply**.
6. All users connected to the Thomson Gateway can now connect to your USB storage device.
7. If you want to limit the number of folders users can access, continue with "6.4 Managing your Shared Content" on page 56.

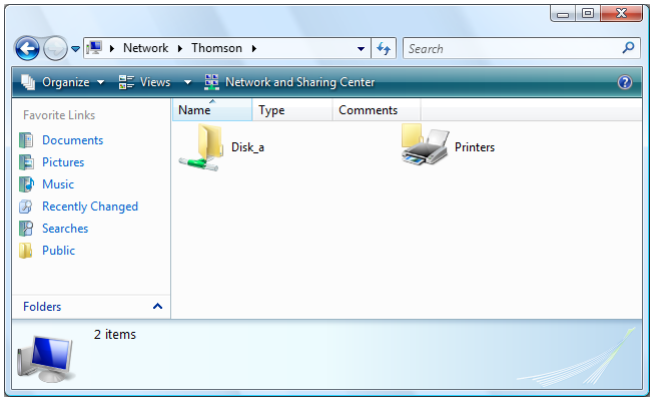
Accessing the shared content on Windows

Proceed as follows:

1. Open **Windows Explorer**.
2. In the address bar type two backslashes followed by the name that you entered in the **Server Name** box (in our example: **\\Thomson**).

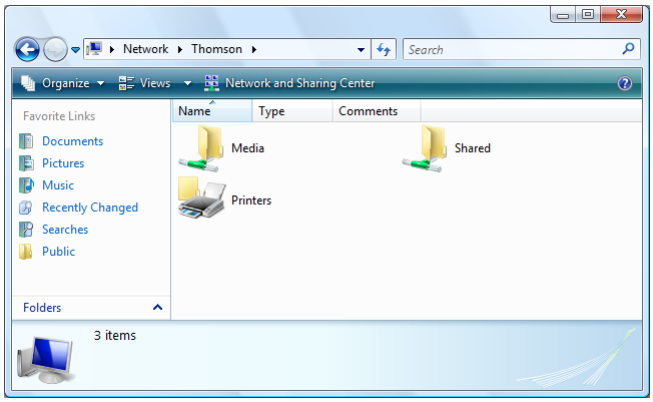
   If you did not provide a server name, type **\\192.168.1.253**.

3. All storage devices that are attached to your Thomson Gateway are listed as folders.



If the storage device has multiple partitions an index number will be added at the end (for example: Disk_a*1* and Disk_a*2*).

If the partition is a managed partition, the **Media** and **Shared** folders will be displayed instead:



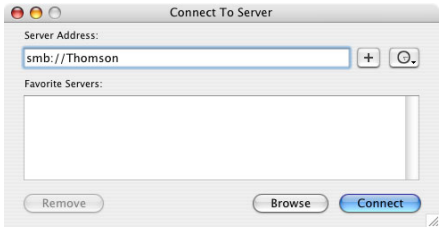
For more information on managed partitions, see "6.4 Managing your Shared Content" on page 56.

4. If you plan to frequently use this folder, it might be useful to map this folder as a network drive. For more information, see your operating system's help.

Accessing the shared content on Mac

Proceed as follows:

1. On the **Go** menu, click **Connect To Server**.
2. The **Connect To Server** window appears.
3. In the **Server Address** box, type **smb://<server name>**, where <server name> is the Server Name you assigned to your USB storage device. So in our example we will type **smb://Thomson**.



If you did not provide a server name, type **smb://192.168.1.253**.

4. The **SMB Mount** window appears.

Select the shared folder you want to mount and click **OK**.

5. The **SMB/CIFS Filesystem Authentication** window appears. You do not need to authenticate, click **OK**.
6. Your USB storage device is now mounted and is displayed on your desktop.

6.2 Using the UPnP AV Media Server

UPnP AV protocol

UPnP AV (AV stands for Audio and Video) is a protocol especially designed to share *media* files on your *local network*.

UPnP AV network components

A UPnP AV network consists of the following components:

- The *UPnP Server* is directly connected to your media files and makes them available on the network. In your network the Thomson Gateway will fulfil this role.
- The *UPnP client* is a software application or hardware device that allows you to play or view the media files provided by your UPnP AV media server.

Setting up the UPnP AV server

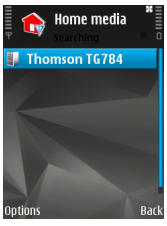
Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Tools** menu, click **Content Sharing**.
3. In the Navigation bar, click **Configure**.
4. Under **UPnP AV Media Server**, click **Server Enabled**.
5. Click **Apply**.

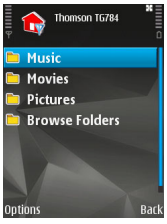
Result

The Thomson Gateway lists all audio, video and picture files located on the connected USB storage device. All UPnP AV clients that are connected to your network are now able to view this list and play or view items from this list.

On your UPnP AV client, the Thomson Gateway's UPnP AV media server will be listed as **THOMSON TGXXX** or **Thomson MediaGateway**. Below you can find a screenshot taken on a smartphone with a UPnP AV client.



Via this entry, you can browse to your media files.



6.3 Using the FTP Server

Introduction

The Thomson Gateway allows you to access your shared content by FTP. This can be useful if you want to be able to access your shared content from the Internet.

Via FTP you can ***download or upload*** all types of files both from your ***local network and the Internet***.

Setting up the FTP server

Proceed as follows:

1. Protect your account with a password.
2. Enable the FTP Server and select the managed partition.

Protect your account with a password

If you did not yet configure your login to the Thomson Gateway GUI with a password:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **User Management**.
3. In the **Pick a task** list, click **Change my password**.
4. Leave the **Old Password** box empty.
5. Type your new password both in the **New Password** box and **Confirm New Password** box.

Enable the FTP Server and select the managed partition

Proceed as follows:

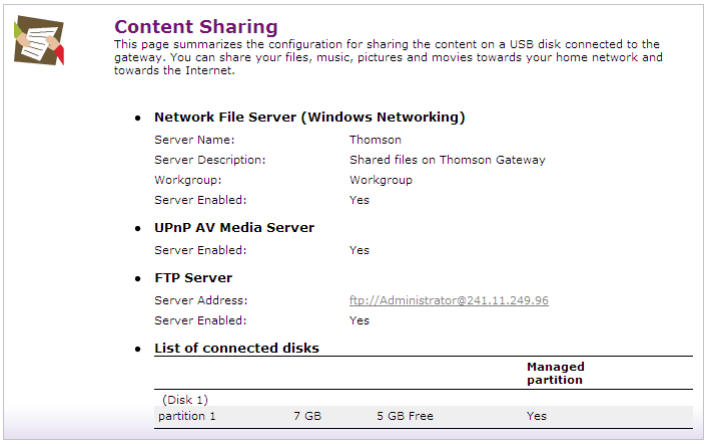
1. Browse to the Thomson Gateway GUI.
2. On the **Tools** menu, click **Content Sharing**.
3. In the Navigation bar, click **Configure**.
4. Under **FTP Server**, click **Server Enabled**.
5. Under **List of connected disks**, click the radio button next to the partition that you want to access using FTP.
6. The Thomson Gateway now creates a **Media** and **Shared** folder on the selected partition. The **Shared** folder will be used as root location for FTP sessions.
7. Click **Apply**.

E-DOC-CTC-20090618-0005 v1.0

Result

The **Shared** folder and its subfolders are now accessible using FTP. The other folders are not accessible via FTP.

If you are connected to the Internet, the link to the FTP server is displayed under FTP Server:


Content Sharing
This page summarizes the configuration for sharing the content on a USB disk connected to the gateway. You can share your files, music, pictures and movies towards your home network and towards the Internet.
Network File Server (Windows Networking)
Server Name: Thomson
Server Description: Shared files on Thomson Gateway
Workgroup: Workgroup
Server Enabled: Yes
UPnP AV Media Server
Server Enabled: Yes
FTP Server
Server Address: ftp://Administrator@241.11.249.96
Server Enabled: Yes
List of connected disks
Managed partition
(Disk 1)
partition 1 7 GB 5 GB Free Yes

On the Thomson Gateway network, you can also access the FTP server using its local address (192.168.1.253).

Additional configuration

Because most service providers use dynamic IP addresses, the IP address of your Internet connection may change frequently. This implies that the link to the FTP server will also change every time the public IP changes. With Dynamic DNS, you can assign a host name to the IP address (for example **mygateway.dyndns.org**). For more information, see “7.3 Dynamic DNS” on page 68.

6.4 Managing your Shared Content

Managed Partition

If you select your drive or partition as managed partition, users only have access to the following folders:

- **Media**
- **Shared**

All other folders will be hidden from the user. These hidden folders are still on the USB storage device, but you can not access them. If you connected more than one USB storage device, those devices will also be hidden.

Media folder

Use the **Media** folder to share your audio, video and picture files. This folder can only be accessed via the following servers:

- The Network File Server
  For more information, see "6.1 Using the Network File Server".
- UPnP AV Media Server.
  For more information, see "6.2 Using the UPnP AV Media Server".

If your partition is managed, the UPnP AV server will only use the media files that are located in the **Media** folder.

Shared folder

The **Shared** folder is a folder to share files both on the ***local network and the Internet***. This folder can only be accessed via the following server:

- The Network File Server
  For more information, see "6.1 Using the Network File Server".
- FTP Server
  For more information, see "6.3 Using the FTP Server".

The FTP Server can only be used with a managed partition.

Ummanaged vs managed

The following table compares the two modes:

Access via	Accessible folders	
	Unmanaged	Managed
Network File Server	All	**Media** and **Shared** folder.
UPnP AV Media Server	All	**Media** folder.
FTP Server	Not available in this mode.	**Shared** folder.

Setting up the managed partition

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Tools** menu, click **Content Sharing**.
3. In the Navigation bar, click **Configure**.
4. Under **List of connected disks**, click the radio button next to the partition you want to configure as Managed Partition.
5. Click **Apply**.

Result

The Thomson Gateway creates following folders:

- **Media**:
  Use this folder to share your media files with others users on your network. You can store your media files in following subfolders:
  - **Movies**
  - **Music**
  - **Pictures**
- **Shared**:
  Use this folder to share your other data with other users on your network. Optionally, users can also access this folder using FTP. For more information, see "6.3 Using the FTP Server" on page 54.

If the above folders already exist, the existing folders are used.

6.5 Safely Removing your USB Storage Device

Introduction

If you just unplug your USB storage device from the Thomson Gateway you may loose your data. To avoid this you must first unmount your USB storage device.

Unmounting your USB storage device

Proceed as follows

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Content Sharing**.
3. In the Navigation bar, click **Configure**.
4. Click **Unmount**.
5. Unplug your USB storage device from the Thomson Gateway.

7 Thomson Gateway Tools

In this chapter

In this chapter we will take a closer look at following features:

Topic	Page
UPnP	60
Assigning a service (HTTP, FTP,...) to a Computer	66
Dynamic DNS	68

Feature availability

Depending on the configuration offered by your service provider, some features may not be available on your Thomson Gateway. For more information, contact your service provider.

7.1 UPnP

Introduction

UPnP is designed to automate the installation and configuration of a (small) network as much as possible. This means that UPnP-capable devices can join and leave a network without any effort of a network administrator.

Supported Operating Systems

The following operating systems support UPnP:

- Windows 7
- Windows Vista
- Windows XP

If your computer is running Windows XP, you first have to install the UPnP component. For more information, see "7.1.4 Installing UPnP on Windows XP" on page 64.

UPnP and the Thomson Gateway

With UPnP:

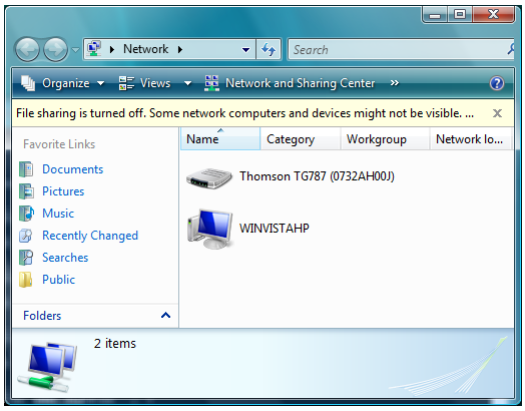
- You can access the Thomson Gateway GUI without having to remember the address of the Thomson Gateway. For more information, see "7.1.1 Accessing Your Thomson Gateway with UPnP" on page 61.
- You can connect/disconnect without having to open the Thomson Gateway GUI.
  For more information, see "7.1.2 Managing your Internet connection with UPnP" on page 62.
- You do not have to manually create port mappings to run services on a computer. The automatic port configuration mechanism for UPnP-enabled games and applications will do this for you. If the application is UPnP-enabled, UPnP will create these entries automatically. For more information, see "7.2 Assigning a service (HTTP, FTP,...) to a Computer" on page 66.

7.1.1 Accessing Your Thomson Gateway with UPnP

Windows 7/Vista

If you computer runs Windows 7/Vista:

1. On the Windows **Start** menu, click **Network**.
2. The **Network** window appears:

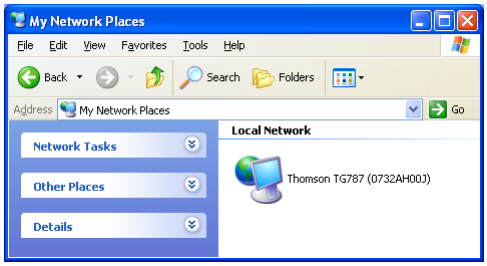


3. Right-click your Thomson Gateway (displayed as THOMSON TGXXX) and click **View device web page**.
4. The Thomson Gateway GUI appears.

Windows XP

If you computer runs Windows XP:

1. Go to **My Network Places**.
2. The **My Network Places** window appears:



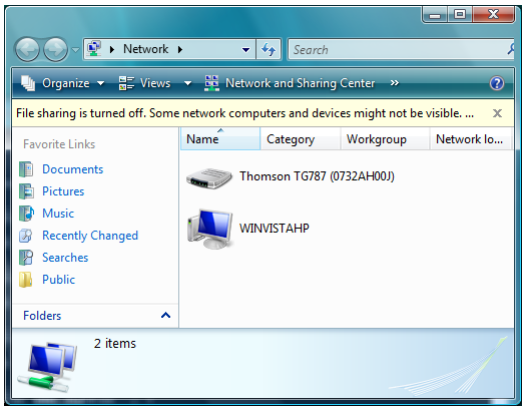
3. Double-click your Thomson Gateway (displayed as THOMSON TGXXX).
4. The Thomson Gateway GUI appears.

7.1.2 Managing your Internet connection with UPnP

Windows 7/Vista

If you computer runs Windows 7/Vista:

1. On the Windows **Start** menu, click **Network**.
2. The **Network** window appears:

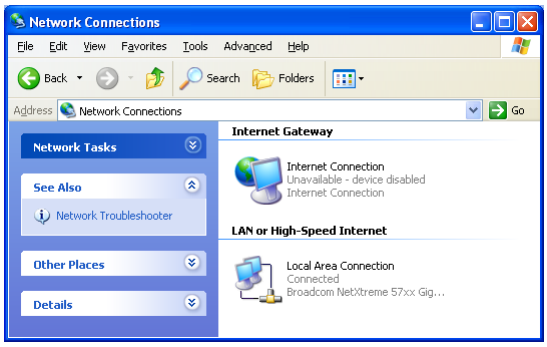


3. Right-click your Thomson Gateway (displayed as THOMSON TGXXX).
4. If you are currently:
   - Connected to the Internet, click **Disable** to disconnect from the Internet.
   - Not connected to the Internet, click **Enable** to connect to the Internet.

Windows XP

Proceed as follows:

1. On the Windows **Start** menu, click **(Settings >) Control Panel**.
2. The **Control Panel** window appears.
   Click **(Network and Internet Connections) > Internet Connections**.
3. The **Network Connections** window appears;



4. If you right-click the **Internet Connection** icon, you can connect/disconnect your connection to the Internet.

Disabling this feature

To prevent that users can connect/disconnect you can enable Extended Security. For more information, see “7.1.3 Configuring UPnP on the Thomson Gateway” on page 63.

7.1.3 Configuring UPnP on the Thomson Gateway

Introduction

On the Thomson Gateway GUI you can:

- Enable/Disable UPnP.
- Enable/Disable Extended Security.

Enable/Disable UPnP

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Game & Application Sharing**.
3. Under **Universal Plug and Play**:
   - Select the **Use UPnP** check box, to enable UPnP.
   - Clear the **Use UPnP** check box, to disable UPnP.
4. Click **Apply**.

Extended Security

If Extended Security is enabled only limited UPnP operation between the host and the Thomson Gateway is allowed:

- A local host is not allowed to connect/disconnect the Thomson Gateway Internet connection. You can then only connect/disconnect the Internet connection via the Thomson Gateway GUI
- Address translation mappings can only be added or changed via UPnP for the host on which the UPnP application is running.

Enable/Disable Extended Security

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Game & Application Sharing**.
3. Under **Universal Plug and Play**, select **Use Extended Security**.
4. Click **Apply**.

7.1.4 Installing UPnP on Windows XP

Adding UPnP

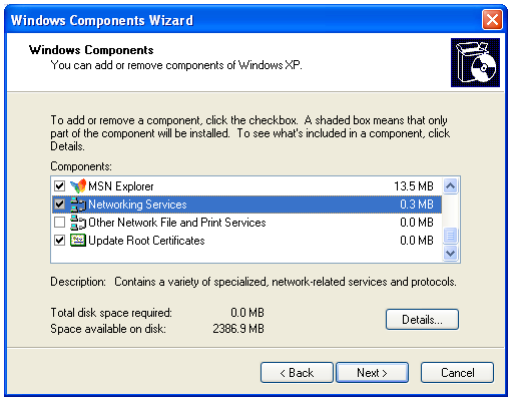
If you are running Microsoft Windows XP, it is recommended to add the UPnP component to your system.

Proceed as follows:

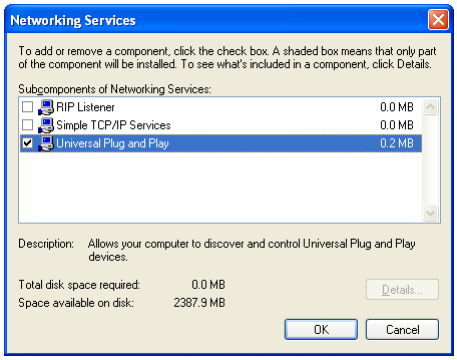
1. In the **Start** menu, click **(Settings >) Control Panel**.
2. The **Control Panel** window appears.

   Click **Add or Remove Programs**.
3. The **Add or Remove Programs** window appears.

   Click **Add/Remove Windows Components**.
4. The **Windows Components Wizard** appears:


Windows Components Wizard
Windows Components
You can add or remove components of Windows XP.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
MSN Explorer 13.5 MB
Networking Services 0.3 MB
Other Network File and Print Services 0.0 MB
Update Root Certificates 0.0 MB
Description: Contains a variety of specialized, network-related services and protocols.
Total disk space required: 0.0 MB
Space available on disk: 2386.9 MB
Details...
< Back
Next >
Cancel

   In the **Components** list, select **Networking Services** and click **Details**
5. The **Networking Services** window appears:


Networking Services
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Networking Services:
RIP Listener 0.0 MB
Simple TCP/IP Services 0.0 MB
Universal Plug and Play 0.2 MB
Description: Allows your computer to discover and control Universal Plug and Play devices.
Total disk space required: 0.0 MB
Space available on disk: 2387.9 MB
Details...
OK
Cancel

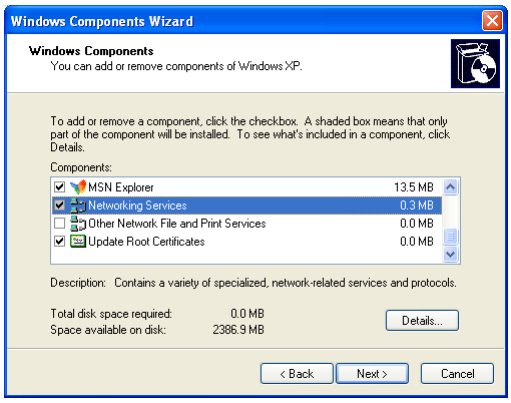
   Select **Universal Plug and Play** or **UPnP User Interface** and click **OK**.
6. Click **Next** to start the installation and follow the instructions in the **Windows Components Wizard**.
7. At the end of the procedure the wizard informs you that the installation was successful. Click **Finish** to quit.

Adding IGD Discovery and Control

Your Windows XP system is able to discover and control Internet Gateway Devices (IGD), like the Thomson Gateway on your local network. Therefore, it is recommended to add the IGD Discovery and Control client to your system.

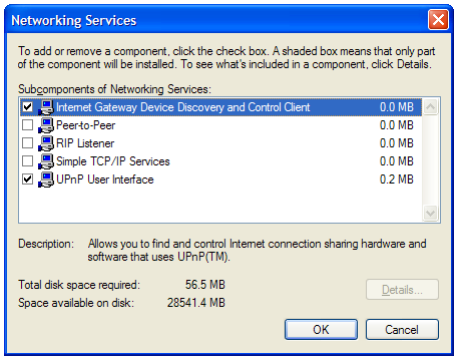
Proceed as follows:

1. On the Windows taskbar, click **Start**.
2. Select **(Settings >) Control Panel** > **Add or Remove Programs**.
3. In the **Add or Remove Programs** window, click **Add/Remove Windows Components**.
4. The **Windows Components Wizard** appears:


Windows Components Wizard
Windows Components
You can add or remove components of Windows XP.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
MSN Explorer 13.5 MB
Networking Services 0.3 MB
Other Network File and Print Services 0.0 MB
Update Root Certificates 0.0 MB
Description: Contains a variety of specialized, network-related services and protocols.
Total disk space required: 0.0 MB
Space available on disk: 2386.9 MB
Details...
< Back
Next >
Cancel

Select **Networking Services** in the **Components** list and click **Details**.

5. The **Networking Services** window appears:


Networking Services
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Networking Services:
Internet Gateway Device Discovery and Control Client 0.0 MB
Peer-to-Peer 0.0 MB
RIP Listener 0.0 MB
Simple TCP/IP Services 0.0 MB
UPnP User Interface 0.2 MB
Description: Allows you to find and control Internet connection sharing hardware and software that uses UPnP(TM).
Total disk space required: 56.5 MB
Space available on disk: 28541.4 MB
Details...
OK
Cancel

Select **Internet Gateway Device Discovery and Control Client** and click **OK**.

6. Click **Next** to start the installation and follow the instructions in the **Windows Components Wizard**.
7. At the end of the procedure, the wizard informs you that the installation was successful. Click **Finish** to quit.

7.2 Assigning a service (HTTP, FTP,...) to a Computer

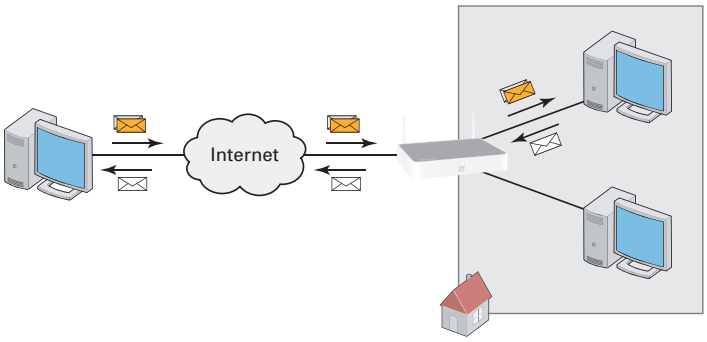
Introduction

The Thomson Gateway allows you to use one internet connection for multiple computers. This means that all your computers share one public IP address, as if only one computer were connected to the outside world.

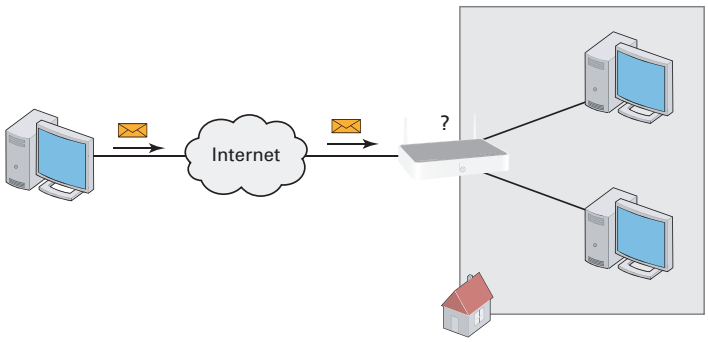
Issue

When the Thomson Gateway receives an incoming message, the Thomson Gateway has to decide to which computer he has to send this message.

If the incoming message is a response to an outgoing message originating from one of your computers, the Thomson Gateway sends the incoming message to this computer.



If your are running a server or an application that acts as a server (for example a HTTP server, internet game), the initial message will come from the internet and the Thomson Gateway has to decide to which computer he should forward the incoming message.



Solution

To avoid this problem you must:

- Enable UPnP.
- Assign a game or application to a local networking device.

UPnP

UPnP is a technology that enables seamless operation of a wide range of games and messaging applications. Your computer will use UPnP to communicate to the Thomson Gateway which services are running on the computer.

For example, when you start a UPnP-enabled application on your computer, it will automatically create the necessary port mappings to this computer.

For more information on UPnP, see "7.1 UPnP" on page 60.

Assign a game or application to a local networking device

If you assign a game or application to a local networking device, you will basically tell the Thomson Gateway that if it receives requests for a specific game or application, it has to forward these messages to a specific computer.

Proceed as follows to do so:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Game & Application Sharing**.
3. In the **Pick a task** list, click **Assign a game or application to a local network device**.
4. In the **Game or application** list, click the service you want to run on the computer. For example, **HTTP Server (World Wide Web)**.

   If the service is not available in the list, click **Create a new game or application** in the **Pick a task** list. For more information, click **Help** on the Thomson Gateway GUI.
5. In the **Device** list, select the computer to which you want to assign the service. Your computer will be listed with it's computer name.
6. All incoming request for the selected service will now be directed to the selected device. The Thomson Gateway will also configure the its firewall to allow this service.

7.3 Dynamic DNS

Introduction

The Dynamic DNS service allows you to assign a dynamic DNS host name (for example mywebpage.dyndns.org) to a broadband connection even if it is using a dynamic IP address. As soon as the device gets a new IP address, the dynamic DNS server updates its entry to the new IP address.

What you need

Before you can configure Dynamic DNS, you first have to create an account at a Dynamic DNS service provider. For example:

- www.dyndns.org
- www.no-ip.com
- www.dtdns.com

Procedure

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Dynamic DNS**.
3. On the Navigation bar, click **Configure**.
4. Select the **Enabled** check box.
5. If necessary, select the broadband connection to which you want to assign the Dynamic DNS host name in the Interface list.
6. Type the user name and password of your Dynamic DNS service account in the corresponding fields.
7. In the **Service** list, click the name of your Dynamic DNS service provider.
8. In the **Host** box, type the host name that you got from the Dynamic DNS service provider (for example mywebpage.dyndns.org).
9. Click **Apply**.

8 Internet Security

Overview

The Thomson Gateway offers you various options to secure your network:

Topic	Page
Firewall	70
Parental Control	71

8 Internet Security

8.1 Firewall

Introduction

The Thomson Gateway comes with an integrated firewall. This firewall has a number of predefined levels to allow you to adjusted the firewall to your needs.

The Firewall is disabled by default.

Changing the security level

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Firewall**.
3. The **Firewall** page appears. In the upper-right corner, click **Configure**.
4. A list with security settings with a brief description is displayed.
5. Select the security level of your choice and click **Apply**.

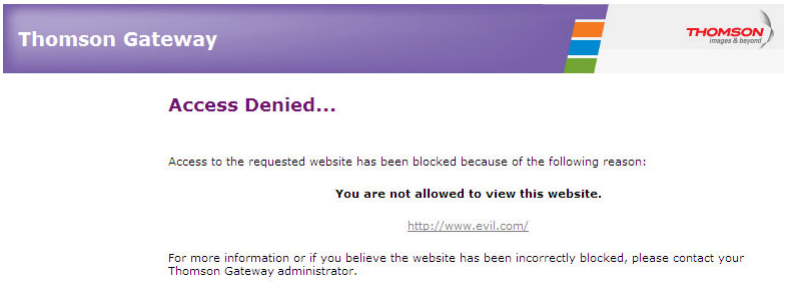
8.2 Parental Control

Introduction

The Thomson Gateway allows you to deny access to specific web sites.

Access Denied page

When a user tries to access a page that is being blocked, the following page is displayed:


Thomson Gateway
THOMSON
Access Denied...
Access to the requested website has been blocked because of the following reason:
You are not allowed to view this website.
http://www.evil.com/
For more information or if you believe the website has been incorrectly blocked, please contact your Thomson Gateway administrator.

Address-based filtering

With address-based filtering (or URL-filtering) you can ***block web sites based on their address*** (for example www.porn.com).

Content-based filtering

As you know, the Internet consists of a large number of web sites, and that number still increases every day. This makes it almost impossible to keep the list of addresses up-to-date.

To solve this problem Thomson Gateway introduced content-based filtering.

With content-based filtering you can ***block web sites based on their content category*** (for example pornography) instead of their URL. This way, you only need to select the appropriate categories and the content category server takes care of the rest. This content category server is updated at regular intervals.

Combining the two filters

Address-based filtering has priority over content-based filtering. This means that when you are blocking a specific category, you can still access a specific address provided you create a rule to allow access to that URL.

For example, if you are blocking content from the **Finance / Investment** category, you can create a rule to make an exception for netbanking.mybank.com.

Activating content-based filtering

Before you can use content-based filtering you must first activate it by purchasing a license key at your service provider or by activating the 30-day trial.

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Parental Control**.

3 In the **Pick a task** list, click **Activate Web Filtering** License.

4 The **Web Filtering Activation** page appears. Under **License Type**, select:

- **30-days evaluation** if you first want evaluate this feature.
- **Standard** if you have already purchased a license key. The License key box appears as soon as you select this option. Type the license key that you received from your service provider in this box.

5 Click **Apply**.

Option 1: content-based filter (combined with the address-based filter)

If you want to use the content-based filtering:

1 Browse to the Thomson Gateway GUI.

2 On the **Toolbox** menu, click **Parental Control**.

3 On the Navigation bar, click **Configure**.

4 Make sure that the **Use Content-Based Filter** check box is selected.

5 Configure the content-based filter. For more information, see "8.2.1 Configuring The Content-based Filter" on page 73.

6 If you want to make exceptions for specific web sites, add the necessary rules in the address-based filter. For more information, see "8.2.2 Adding Rules for the Address-Based Filter" on page 74.

Option 2: address-based filter only

Take this option if content filtering is not available on your Thomson Gateway or you don't want to use it.

To configure address-based filtering:

1 Browse to the Thomson Gateway GUI.

2 On the **Toolbox** menu, click **Parental Control**.

3 On the Navigation bar, click **Configure**.

4 Make sure that the **Use Address-Based Filter** check box is selected.

5 In the **Action for Unknown Sites**, select:

- **Allow** as the default rule if you want to allow access to ***all*** web sites and manually specify which web sites may not be accessed.
- **Block** as the default rule if you want to deny access to ***all*** web sites and manually specify a number of web sites that may be accessed.

6 Click **Apply**.

7 If you want to make exceptions for specific web sites, add the necessary rules in the address-based filter.

For more information, see "8.2.2 Adding Rules for the Address-Based Filter" on page 74.

8.2.1 Configuring The Content-based Filter

Accessing the configuration page

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Parental Control**.
3. On the Navigation bar, click **Configure**.
4. Under **Content-Based Filtering** you can change the settings of the content-based filter.

Configuring the content-based filter

Under **Content-Based Filtering**:

1. Select **Use Content-Based Filter** check box (if needed).
2. In the **Action for uncategorised sites** list, select a default action for sites that have not yet been categorised.
3. Under **Content Level**, select the content level you want to use.

   If you want a more detailed view of the content that will be blocked for this level, click the **Edit** link next to the content level.

   If needed, you can change the **Name**, **Description** and **Configuration** of the content level.
4. Click **Apply** after you have made your changes.

Creating your own content level

Proceed as follows:

1. In the **Pick a task** list, click **Create a new content level**.
2. Enter a **Name** and **Description** for your content level and click **Next**.
3. Under **Configuration**, select:
   - **Clone Existing Level** if you want to start from an existing level. You can now select the level that you want to clone.
   - **White list** if you want to block everything and select which content should be allowed.
   - **Black list** if you want to allow everything and select which content should be blocked.

   Click **Next**.
4. Under **Configuration**:
   - Select the check boxes of the categories/groups you want to allow.
   - Clear the check boxes of the categories/groups you want to block.
5. Click **Apply**.
6. Configure the content-based filter with the new level. For more information, see “Configuring the content-based filter” on page 73.

8.2.2 Adding Rules for the Address-Based Filter

Introduction

Address-based filtering has a higher priority than content-based filtering. This means that when you are blocking a specific category, you can still access a specific site if you allow it in the address-based filter.

Example

If you block content from the **Finance / Investment** category and allow access to netbanking.mybank.com, netbanking.mybank.com will still be accessible.

Options

With the address-based filter you can:

- Deny access to a specific web site.
- Allow access to a specific web site.
- Redirect a web site.
- Redirect all web sites.

Deny access to a specific web site

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Parental Control**.
3. Make sure the **Use Address-Based Filter** check box is selected.
4. Type the URL of the Web site you want to block (for example “mail.provider.com”) in the **Web Site** box.
5. In the **Action** list, click **Block**.
6. Click **Add**.

Allow access to a specific web site

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Parental Control**.
3. Make sure the **Use Address-Based Filter** check box is selected.
4. Type the URL of the Web site you want to allow (for example “netbanking.bank.com”) in the **Web Site** box.
5. Click **Allow** in the **Action** list.
6. Click **Add**.

Redirect a web site

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Toolbox** menu, click **Parental Control**.
3. Make sure the **Use Address-Based Filter** check box is selected.

4 Type the URL of the Web site you want to redirect (for example “cracks.am”) in the **Web Site** box.
5 Click **Redirect** in the **Action** list.
6 Type the URL of the Web site you want to redirect to (for example “mycompany.com/internetpolicy.htm”) in the **Redirect** box.
7 Click **Add**.

Redirect all web sites

Proceed as follows:

1 Browse to the Thomson Gateway GUI.
2 On the **Toolbox** menu, click **Parental Control**.
3 Make sure the **Use Address-Based Filter** check box is selected.
4 Type “*” in the **Web Site** box.
5 Click **Redirect** in the **Action list**.
6 Type the URL of the Web site you want to redirect to (for example “mycompany.com/internetpolicy.htm”) in the **Redirect** box.
7 Click **Add**.

8 Internet Security

9 Troubleshooting

Introduction

This chapter suggests solutions for problems you may encounter while installing, configuring or using your Thomson Gateway.

If the suggestions do not resolve the problem, look at the support pages on www.thomson.net or contact your service provider.

Topics

This chapter describes the following topics:

Topic	Page
Setup Troubleshooting	78
General Thomson Gateway Troubleshooting	79
Voice over IP Troubleshooting	82
Reset to Factory Defaults	83

9 Troubleshooting

9.1 Setup Troubleshooting

The Setup CD does not start automatically

If your computer runs:

- Microsoft Windows:
  1. Click the Windows **Start** button.
  2. Click **Run**.
  3. In the **Open** field, type the following path: **D:\Setup.exe**, where D stands for the drive letter of your CD- or DVD-ROM drive.
- Mac OS X:
  1. On your desktop, double-click the CD icon.
  2. Double-click **Menu**.

Your Thomson Gateway has not been found

If you see this error during setup, make sure that:

- The Thomson Gateway is turned on and fully initialized.
- Your computer has a valid IP address, that is any address but 0.0.0.0. For more information, consult the help of your operating system.
- No dedicated firewall device or router is placed between your computer and the Thomson Gateway.
- No personal network security software (for example firewall software) is running on your computer.
- Your computer is correctly connected to the Thomson Gateway.

9.2 General Thomson Gateway Troubleshooting

None of the lights light up (Thomson Gateway does not work)

Make sure that:

- The Thomson Gateway is plugged into a power socket outlet.
- You are using the correct power supply for your Thomson Gateway device.

The power requirements for your Thomson Gateway are clearly indicated on the identification label of the Thomson Gateway. Only use the power adaptor supplied with your Thomson Gateway.

- The Thomson Gateway is turned on via the push button or rocker switch on the back panel.

The Broadband LED does not light up

Make sure that:

- The DSL cable is correctly connected. For more information, see "1.2 Installing your Thomson Gateway".
- The DSL service is enabled on your telephone line. For more information, contact your Internet Service Provider.

The Internet LED does not light up

Make sure that your user name and password are correct.

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Broadband** menu, click **Internet Services**.
3. Under **Internet**, click **View More**.
4. Check your user name
5. Re-enter your password.
6. Click **Connect**.

Thomson Gateway unreachable

If your Thomson Gateway cannot be reached, you might consider a hardware reset as described in "9.6 Reset to Factory Defaults" on page 83.

Poor Thomson Gateway performance

Make sure that the Thomson Gateway is installed and configured as instructed in "1 Installation" on page 3 or as instructed by the Service Provider.

9.3 Wired Connection Troubleshooting

Ethernet LED does not light up

Make sure that:

- The Ethernet cable is securely connected to the Ethernet port on your Thomson Gateway and your computer.
- You are using the correct cable type for your Ethernet equipment, that is UTP CAT5 with RJ-45 connectors.

9.4 Wireless Connection Troubleshooting

No Wireless Connectivity

Try the following:

- Change the wireless channel.
- Make sure that the wireless client is configured for the correct wireless settings (Network Name, security settings).
- Check the signal strength, indicated by the wireless client manager. If the signal is low, try repositioning the Thomson Gateway or directing the Thomson Gateway's antenna(s) for optimal performance.
- Make sure that the wireless client adapter is enabled (message like "radio on").

Poor Wireless Connectivity or Range

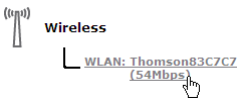
Try the following:

- Change the wireless channel.
- Check the signal strength, indicated by the wireless client manager. If the signal is low, try to place the Thomson Gateway or to direct the Thomson Gateway's antenna(s) for optimal performance.
- Use WPA(2)-PSK as encryption.
  For more information, see "3.3 Securing Your Wireless Connection" on page 29.

Change the wireless channel

Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the left menu, click **Home Network**.
3. Under **Wireless**, click your access point.



Your access point will be listed in the following format: "WLAN:<Network Name> (<Actual Speed>)". For example, **WLAN: Thomson83C7C7 (54Mbps)**.

4. The **Wireless Access Point** page appears.
5. In the Navigation bar, click **Configure**.
6. Under **Configuration**, select the channel of your choice in the **Channel Selection** list.
7. Click **Apply**.

Can not connect via WPS

If you are having trouble connecting your wireless client via WPS, try to configure it manually. For more information, see "3.2 Connecting Your Wireless Client without WPS" on page 28.

9.5 Voice over IP Troubleshooting

Introduction

If you cannot make or receive any phone calls via your Thomson Gateway, try the suggestions in the following sections.

Calling over VoIP

If you have problems calling via VoIP, check whether:

- Your phone is correctly connected to the Thomson Gateway.
- Your phone is working on the traditional telephone network (PSTN):
  - Connect your phone directly to the telephone wall outlet.
  - Try to make a phone call.
- Your phone number, user name, and password are configured correctly.
- The registrar's and proxy server's IP address and port number are configured correctly.
- The **Power**, **Broadband/DSL** and **Voice** LEDs are on.

Calling over the traditional telephone network (PSTN)

If you have problems calling via the traditional telephone network, check whether:

- Your phone is correctly connected to the Thomson Gateway.

If the Thomson Gateway is turned off, phone calls are always routed over PSTN.

- Your phone is working on the PSTN network:
  - Connect your phone directly to PSTN.
  - Try to make a phone call.
- The Forced FXO service is activated, this means that your service provider may request you to dial an extra prefix for making calls via PSTN.

Problems with Telephony Services

If you have a problem with a service, check whether the service is activated. For more information, see "4.3.2 Activating a Telephony Service on your Thomson Gateway" on page 42.

9.6 Reset to Factory Defaults

Resetting your Thomson Gateway

If at some point you can no longer connect to the Thomson Gateway or you want to make a fresh install, it may be useful to perform a reset to factory defaults.

Warning

A reset to factory default settings deletes all configuration changes you made. Therefore, after the reset, a reconfiguration of your Thomson Gateway will be needed.

Also your wireless clients will have to be re-associated, as described in "3 Wireless Access" on page 25.

Methods

You can choose between:

- Resetting the Thomson Gateway via the Thomson Gateway GUI
- Reset the Thomson Gateway via the Reset button

Resetting the Thomson Gateway via the Thomson Gateway GUI

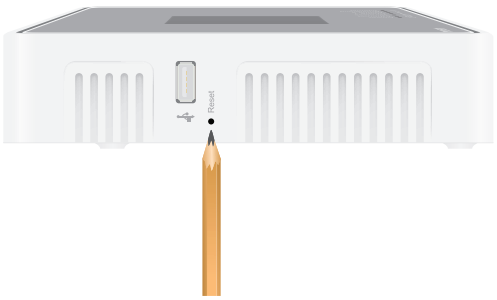
Proceed as follows:

1. Browse to the Thomson Gateway GUI.
2. On the **Thomson Gateway** menu, click **Configuration**.
3. In the **Pick a task** list, click **Reset my** Thomson Gateway.
4. The Thomson Gateway restores the initial configuration and restarts.
5. The Thomson Gateway returns to the Thomson Gateway home page (unless the IP address of your computer is not in the same subnet as the default IP address of the Thomson Gateway, being 192.168.1.254).

Reset the Thomson Gateway via the Reset button

Proceed as follows:

1. Make sure the Thomson Gateway is turned on.
2. Push the **Reset** button until the **Power** LED lights red - this will take about 7 seconds.



3. Release the **Reset** button.
4. The Thomson Gateway restarts.

Your system administrator may have disabled the physical reset button of the Thomson Gateway. In this case, a hardware reset to defaults is not possible.

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